

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



21 APR 2005

(43) International Publication Date  
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number  
WO 2004/037982 A2

- (51) International Patent Classification<sup>7</sup>: C12N  
(21) International Application Number: PCT/US2003/033433  
(22) International Filing Date: 22 October 2003 (22.10.2003)  
(25) Filing Language: English  
(26) Publication Language: English  
(30) Priority Data: 60/421,252 24 October 2002 (24.10.2002) US  
(71) Applicant (for all designated States except US): BIO-GEN, INC. [US/US]; 14 Cambridge Center, Cambridge, MA 02142 (US).  
(72) Inventor; and  
(75) Inventor/Applicant (for US only): PRENTICE, Holly [US/US]; 35 Nathan Lane, Carlisle, MA 01741 (US).  
(74) Agent: FRASER, Jank, K., J., D.; Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

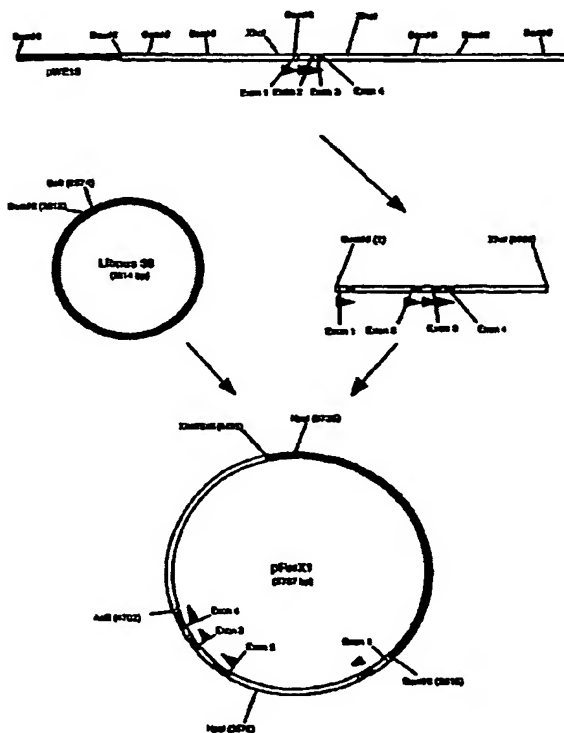
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,

[Continued on next page]

(54) Title: HIGH EXPRESSION LOCUS VECTOR BASED ON FERRITIN HEAVY CHAIN GENE LOCUS



(57) Abstract: High expression locus vectors based, in part, on the ferritin heavy chain locus are disclosed. The vectors include distal 5' flanking sequences and/or proximal 5' regulatory sequences derived from ferritin heavy chain locus. The vectors include a site for insertion of heterologous sequences and proximal 3' regulatory and distal 3' flanking sequences. The proximal 3' regulatory and distal 3' flanking sequences are optionally derived with the vectors, and methods of producing heterologous proteins encoded by the vectors, are also disclosed.

Best Available Copy

WO 2004/037982 A2